

ABSTRACT

[0054] A composition includes acetyl-L-carnitine or its pharmacologically acceptable salt and a mixture of polyphenols containing hydroxytyrosol in an effective weight ratio. Carnitine can be L-carnitine, propionyl-L-carnitine, valeryl-L-carnitine, isovaleryl-L-carnitine or mixtures thereof. The composition has a weight ratio of carnitine:hydroxytyrosol of from 100:1 to 1:10. Also disclosed is a method of preventing tissue damage caused by the presence of free radicals due to environmental pollution; of preventing brain or myocardial lesions induced by free radicals following cerebral or myocardial ischemia and reperfusion; of preventing diabetic or toxic neuropathies and metabolic disorders of glucose utilization, which includes administering the composition.